Amendments to the claims:

This listing of claims replaces all prior versions and listings of the claims in the application.

In the claims:

Please amend the claims as follows:

Listing of Claims:

1. (Currently Amended) A method of position tracking and communication in a locale with a plurality of probes interconnected to a computing device and having a least one mobile device, comprising the steps of:

(a) placing said probes at locations in said locale;

(b) modeling said locale with site-specific information using a network of states and transitions with probabilities;

(c) deploying at least one of said mobile devices in said locale;

(d) encoding each of said deployed mobile devices with an identifier;

(e) sending out beacons by said probes;

(f) responding by at least one of said mobile devices upon receiving said beacon from at least one of said probes;

(g) gathering the whereabouts of said mobile device to input to said computing device;

(h) calculating the most probable location of said mobile device using said whereabouts of said mobile device and said network of states and transitions with probabilities; and

(i) updating location information for said mobile device.

2. (Currently Amended) In the method of position tracking and communication of claim **1**, wherein deploying at least one of said mobile devices comprises the steps of;

(a) calculating the desired life span of said mobile device;

(b) equipping said mobile device with battery power sources corresponding to said desired life span; and

(c) attaching said mobile device to a person or object to be tracked.

3. (Currently Amended) In the method of position tracking and communication of claim **1**, wherein said encoding with an identifier comprises the steps of;

(a) calculating the necessary number of mobile devices in the locale;

(b) separating said identifier into two parts, one common part for uniqueness within said locale and one group part for supplementary use;

(c) communicating said common part to said probes;

(d) sending said group part of said identifier to said probes upon request; and

(e) reusing said identifier when said mobile device encoded with said identifier has exhausted its battery power.

4. (Currently Amended) In the method of position tracking and communication of claim **1**, wherein calculating the most probable location of said mobile device comprises the steps of;

(a) retrieving the current location of said mobile device;

(b) retrieving the past history of said mobile device; and

(c) mapping said current location and said history of said mobile device with site specific information using said network of states and transitions with probabilities.

5. (Currently Amended) The method of position tracking and communication of claim **1**, further comprising the step of notifying said mobile device with a message comprising the steps of;

(a) calculating said location of said mobile device;

(b) determining which messaging device is appropriate to communicate with said mobile device; and

(c) sending said message to said messaging device for transmission to said mobile device.

6. (Currently Amended) In the method of position tracking and communication of claim **1**, wherein updating said location information for said mobile device comprises the steps of;

(a) retrieving current location of said mobile device;

(b) calculating for discrepancies with said site specific information;

(c) retrieving history data on similar occurrence(s);

(d) alerting a system operator of said discrepancies; and

(e) changing said network of states and transitions with probabilities.

7. (Currently Amended) A system for position tracking and communication in a locale having a plurality of probes interconnected to a computing device and having at least one mobile device in the locale, comprising:

(a) configuring means to place said probes in said locale;

(b) modeling means to model said locale with site specific information using a network of states and transitions with probabilities;

(c) installing means to deploy at least one of said mobile devices in said locale for position tracking and communication;

(d) installing means to encode each of said mobile devices with an identifier;

(e) probing means to send out beacons by said probes;

(f) responding means for said mobile device upon receiving said beacon from said probes;

(g) collecting means to gather the whereabouts of said mobile devices to feed to the computing device;

(h) determining means to calculate the most likely location of said mobile device; and

(i) updating means to calculate location changes of said mobile device.

8. (New Claim) The system for position tracking and communication of claim 7, further comprising a means for notifying said mobile device with a message, comprising;

(a) calculating means to calculate said location of said mobile device;

(b) determining means for determining which messaging device is appropriate to communicate with said mobile device; and

(c) sending means to transmit said message to said messaging device for transmission to said mobile device.

9. (New Claim) The method of position tracking and communication of claim 1, wherein placing said probes at locations in said locale comprises the step of placing said probes in locations with non-overlapping coverage areas.